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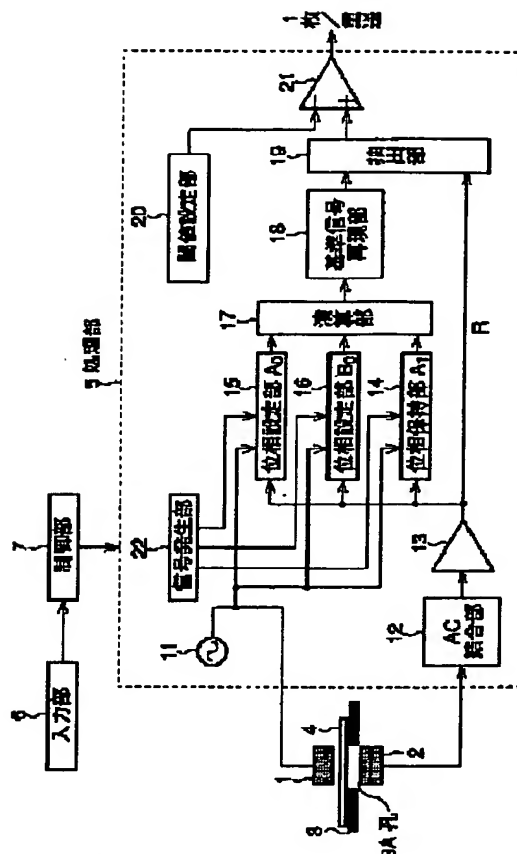
APPLICATION DATE : 21-01-99
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TITLE : PAPERS DETECTION DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To detect an overlapped feeding of papers without being influenced by a thickness of the papers and an environment of the surroundings.

SOLUTION: A supersonic wave transmitted from a supersonic transmitter 1 is received by a supersonic receiver 2 through papers 4. A receipt signal is inputted to an extraction part 19 and is compared with a phase of a standard signal which a standard signal reproducing part 18 outputs and then is converted to a signal of level corresponding to a phase difference. The signal of level corresponding to the phase difference is compared with a threshold value set in a threshold value setting part 20 in a comparator 21. When only one sheet of the paper 4 is fed, the comparator outputs a signal of a high level and when the paper 4 is overlapped-fed, the comparator outputs a signal of a low level.

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